

IN THE CLAIMS

Please amend the claims as follows:

00T290" 2E/86560

1. (Amended) [Adaptive] An adaptive filter comprising at least two inputs for receiving at least two signals, and an output for supplying an output signal, characterized in that the adaptive filter further comprises:

5 means for determining coefficient updates [are determined] in a transformed domain; and [that the filter comprises]

 means [to reduce] for reducing the effect of [the] correlation between the input signals on the coefficient updates.

2. (Amended) [Adaptive] The adaptive filter [according to] as claimed in claim 1, characterized in that the transformed domain is the frequency domain.

3. (Amended) [Adaptive] The adaptive filter [according to claim2] as claimed in claim 2, characterized in that the filter comprises an update algorithm with transformed auto- and a cross correlation matrices.

4. (Amended) [Adaptive] The adaptive filter [according to] as claimed in claim 2, characterized in that said reducing means achieves the reduction of the effect of the correlation [is achieved] by multiplying the frequency domain input signals with
5 the inverse of the input channel's power matrix.

5. (Amended) [Adaptive] The adaptive filter [according to] as claimed in claim 4, characterized in that said adaptive filter comprises a first order recursive network for determining the input channel's power matrix [is determined by a first order recursive network], [with] said first order recursive network receiving the product of the frequency domain input signals and their conjugates as input, and [further characterized] in that, at each iteration, a certain positive value is added to all elements of the main diagonal.

6. (Amended) [Adaptive] The adaptive filter [according to] as claimed in claim 4, characterized in that the algorithm comprises [a] solving a linear set of equations with the input channel power matrix as one of the elements of the equations.

7. (Amended) [Adaptive] The adaptive filter [according to] as claimed in claim 3, characterized in that the adaptive filter comprises means for directly estimating the inverse of the input channel's matrix [is estimated directly,] using a recursive update algorithm, and [further characterized] in that a limit is imposed on the eigenvalues of the matrix.

8. (Amended) [Signal] A signal processing device comprising
[a] an adaptive filter [according to] as claimed in claim 1.

9. (Amended) [Signal] The signal processing device [according
to] as claimed in claim 8, characterized in that the device further
comprises a dynamic echo and noise suppressor as a post-processing
device coupled to an output of the adaptive filter.

10. (Amended) [Signal] The signal processing device [according
to] as claimed in claim 8, characterized in that the signal-
processing device comprises a programmable filter.

11. (Amended) [Teleconferencing] A teleconferencing system
comprising at least one signal-processing device [according to] as
claimed in claim 8.

12. (Amended) [Voice controlled] A voice-controlled electronic
device comprising at least one signal-processing device [according
to] as claimed in claim 8.

13. (Amended) [Noise] A noise cancellation system comprising at
least one signal-processing device [according to] as claimed in
claim 8.

14. (Amended) [Method] A method for filtering at least two signals and for supplying an output signal, characterized in that the method comprises the steps:

*As
well*
5 determining [determines the] coefficient updates in the frequency domain; and

reducing [that the method reduces] the effect of correlation between the input signals on the coefficient updates.

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